

#### IV. AMENDMENTS TO THE CLAIMS

A. Please cancel claims 23-24, 30 and 36 from the case.

B. Please further amend the claims as indicated below:

1. (Twice amended) A method for solution-mining of a subterranean material in an elbow well having a single cavity, ~~the~~ said method comprising:

injecting a fluid into ~~an~~ said elbow well, ~~the~~ said fluid forming a subterranean mixture with ~~the~~ said subterranean material in a said single cavity; and

collecting ~~the~~ said subterranean mixture from ~~the~~ said elbow well.

2. (Amended) The method of claim 1, wherein ~~the~~ said subterranean material comprises trona.

3. (Amended) The method of claim 1, further comprising making ~~the~~ said elbow well.

4. (Amended) The method of claim 3, wherein said making ~~the~~ said elbow well comprises drilling an elbow well into a bed comprising ~~the~~ said subterranean material.

5. (Amended) The method of claim 1, wherein ~~the~~ said method further comprises casing ~~the~~ said elbow well.

6. (Amended) The method of claim 1, wherein said injecting ~~the~~ a fluid further comprises injecting ~~the~~ said fluid into an injection tube located in ~~the~~ said elbow well.

7. Cancelled.

8. (Twice amended) The method of claim 1, wherein ~~the~~ said single cavity comprises ~~the~~ said subterranean material mixture after said injecting ~~the~~ said fluid.

9. (Amended) The method of claim 1, wherein ~~the~~ said subterranean mixture comprises a subterranean solution.

10. (Amended) The method of claim 1, wherein ~~the~~ said fluid comprises water.

11. (Amended) The method of claim 1, wherein ~~the~~ said fluid comprises a caustic mixture.

12. (Amended) The method of claim 1, wherein ~~the~~ said method further comprises heating ~~the~~ said fluid.

13. (Amended) The method of claim 1, wherein said collecting ~~the~~ said subterranean mixture further comprises collecting ~~the~~ said subterranean mixture through a production tube located in ~~the~~ said elbow well.

14. (Amended) The method of claim 1, wherein said collecting ~~the~~ said subterranean mixture comprises pumping ~~the~~ said subterranean mixture.

15. (Twice amended) The method of claim 14, wherein said pumping ~~the~~ said subterranean mixture comprises lifting ~~the~~ said subterranean mixture through a production tube.

16. (Amended) The method of claim 15, wherein ~~the~~ said method further comprises delivering ~~the~~ said subterranean mixture to a collection location.

17. (Amended) The method of claim 16, wherein ~~the~~ said collection location comprises the earth's surface.

18. (Amended) The method of claim 14, wherein ~~the~~ said method further comprises placing a pump in ~~the~~ said elbow well.

19. (Amended) The method of claim 1, wherein ~~the~~ said method occurs at ambient well pressure.

20. (Amended) The method of claim 1, wherein ~~the~~ said method further comprises processing ~~the~~ said subterranean mixture after said collecting ~~the~~ said subterranean mixture.

21. (Twice amended) A system for solution-mining of a subterranean material in an elbow well having a single cavity, ~~the~~ said system comprising:

a means for injecting a fluid into ~~an~~ said elbow well, ~~the~~ said fluid forming a subterranean mixture with ~~the~~ said subterranean material in a said single cavity; and

a means for collecting ~~the~~ said subterranean mixture from ~~the~~ said elbow well.

22. (Amended) The system of claim 21, wherein ~~the~~ said subterranean material comprises trona.

23. Cancelled.

24. Cancelled.

25. (Amended) The system of claim 21, wherein ~~the~~ said system further comprises a means for casing ~~the~~ said elbow well.

26. (Amended) The system of claim 21, wherein said means for injecting ~~the~~ said fluid further comprises an injection tube located in ~~the~~ said elbow well.

27. (Amended) The system of claim 21, wherein ~~the~~ said subterranean mixture comprises a subterranean solution.

28. (Amended) The system of claim 21, wherein ~~the~~ said fluid comprises water.

29. (Amended) The system of claim 21, wherein ~~the~~ said fluid comprises a caustic mixture.

30. Cancelled.

31. (Amended) The system of claim 21, wherein said means for collecting ~~the~~ said subterranean mixture comprises a means for pumping ~~the~~ said subterranean mixture.

32. (Amended) The system of claim 31, wherein ~~the~~ said system further comprises a means for placing a pump in ~~the~~ said elbow well.

33. (Amended) The system of claim 31, wherein ~~the~~ said system further comprises a means for delivering ~~the~~ said subterranean mixture to a collection location.

34. (Amended) The system of claim 33, wherein ~~the~~ said collection location comprises the earth's surface.

35. (Twice amended) The system of claim 21, wherein ~~the~~ said system operates at ambient well pressure.

36. Cancelled.

37. (Amended) An apparatus for solution-mining of a subterranean material in an elbow well having a single cavity, ~~the~~ said apparatus comprising:

an injection tube, wherein ~~the~~ said injection tube has an injection tube inner diameter of sufficient size to allow for injection of a fluid for mining of a subterranean material; and

a production casing, wherein ~~the~~ said production casing has a production casing inner diameter of sufficient size to allow for production of a subterranean mixture of ~~the~~ said fluid and

the said subterranean material between an outer surface of ~~the~~ said injection tube and an inner surface of ~~the~~ said production casing.

38. (Amended) The apparatus of claim 37, further comprising a production tube for collecting ~~the~~ said subterranean mixture.

39. (Amended) The apparatus of claim 38, further comprising a pump connected to ~~the~~ said production tube.